

AMENDMENTS TO THE CLAIMS

Please enter the following amendments without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented): An immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising:
a polynucleotide comprising an immunostimulatory sequence (ISS) linked to a nonbiodegradable microcarrier (MC), wherein the ISS comprises a sequence selected from the group consisting of 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3', 5'-TCGTTTT-3' and 5'-TCGTCGX₁-3', wherein X₁ is a nucleotide, and wherein the polynucleotide is less than about 200 nucleotides in length.
2. (original): The IMP/MC complex of claim 1, wherein said polynucleotide is covalently linked to said microcarrier.
3. (original): The IMP/MC complex of claim 1, wherein said polynucleotide is non-covalently linked to said microcarrier.
4. (original): The IMP/MC complex of claim 1, wherein said microcarrier is a liquid phase microcarrier.
5. (original): The IMP/MC complex of claim 1, wherein said microcarrier is a solid phase microcarrier.
6. (original): The IMP/MC complex of claim 1, wherein said microcarrier is from 10 nm to 10 μ m in size.
7. (original): The IMP/MC complex of claim 6, wherein said microcarrier is from 25 nm to 5 μ m in size.

8. (original): The IMP/MC complex of claim 1, wherein said complex is antigen-free.
- 9-13. (canceled)
14. (previously presented): The IMP/MC complex of claim 1, wherein the ISS comprises the sequence 5'-TCGTCGA-3'.
15. (canceled)
16. (previously presented): The IMP/MC complex of claims 1, or 14, wherein said complex further comprises an antigen.
17. (original): The IMP/MC complex of claim 16, wherein said antigen is an allergen.
18. (original): The IMP/MC complex of claim 1, wherein said polynucleotide comprises a phosphate backbone modification.
19. (original): The IMP/MC complex of claim 18, wherein said phosphate backbone modification is a phosphorothioate.
20. (currently amended): An immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising:
a polynucleotide linked to a nonbiodegradable microcarrier (MC), wherein the polynucleotide comprises the sequence [[5'-CG-3']] 5'-TCG-3' and wherein the polynucleotide is 7 nucleotides in length.
21. (canceled)

22. (currently amended): The IMP/MC complex of claim [[21]] 20, wherein the polynucleotide consists of the sequence 5'-TCGX₁X₂X₃X₄-3' or the sequence 5'-X₁TCGX₂X₃X₄-3', wherein X₁, X₂, X₃, X₄ are nucleotides.

23. (original): The IMP/MC complex of claim 22, wherein the polynucleotide consists of the sequence 5'-TCGTCGX₁-3', wherein X₁ is a nucleotide.

24. (original): The IMP/MC complex of claim 22, wherein the polynucleotide consists of a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.

25. (currently amended): The IMP/MC complex of claim 20, wherein said polynucleotide ~~further~~ comprises two copies of the sequence [[5'-T, C, G-3']] 5'-TCG-3'.

26. (original): The IMP/MC complex of claim 20, wherein said complex further comprises an antigen.

27. (original): The IMP/MC complex of claim 26, wherein said antigen is an allergen.

28. (original): The IMP/MC complex of claim 20, wherein said polynucleotide comprises a phosphate backbone modification.

29. (original): The IMP/MC complex of claim 28, wherein said phosphate backbone modification is a phosphorothioate.

30. (withdrawn): A method of modulating an immune response in an individual comprising administering to an individual a composition comprising an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex in an amount sufficient to modulate an immune response in said individual, said complex comprising a polynucleotide linked to a nonbiodegradable microcarrier (MC), wherein the polynucleotide comprises the sequence 5'-C, G-3'.

31. (withdrawn): The method of claim 30, wherein said microcarrier is a solid phase microcarrier.

32. (withdrawn): The method of claim 30, wherein said microcarrier is a liquid phase microcarrier.

33. (withdrawn): The method of claim 30, wherein said polynucleotide is covalently linked to said microcarrier.

34. (withdrawn): The method of claim 30, wherein said polynucleotide is non-covalently linked to said microcarrier.

35. (withdrawn): The method of claim 30, wherein said microcarrier is less than about 10 μm in size.

36. (withdrawn): The method of claim 30, wherein said complex is antigen-free.

37. (withdrawn): The method of claim 30, wherein a Th1-type immune response is stimulated.

38. (withdrawn): The method of claim 30, wherein a Th2-type immune response is suppressed.

39. (withdrawn): The method of claim 30, wherein interferon-gamma (IFN- γ) is increased in said individual.

40. (withdrawn): The method of claim 39, wherein said individual has idiopathic pulmonary fibrosis.

41. (withdrawn): The method of claim 30, wherein interferon-alpha (IFN- α) is increased in said individual.
42. (withdrawn): The method of claim 41, wherein said individual has a viral infection.
43. (withdrawn): The method of claim 30, wherein levels of IgE is reduced in said individual.
44. (withdrawn): The method of claim 30, wherein the polynucleotide comprises the sequence 5'-T, C, G-3'.
45. (withdrawn): The method of claim 30, wherein the polynucleotide comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3'.
46. (withdrawn): The method of claim 44, wherein the polynucleotide comprises the sequence SEQ ID NO:1.
47. (withdrawn): The method of claim 44, wherein the polynucleotide comprises the sequence 5'-TCGX₁X₂X₃X₄-3' or the sequence 5'-X₁TCGX₂X₃X₄-3', wherein X₁, X₂, X₃, X₄ are nucleotides.
48. (withdrawn): The method of claim 47, wherein the polynucleotide comprises the sequence 5'-TCGTCGX₁-3', wherein X₁ is a nucleotide.
49. (withdrawn): The method of claim 47, wherein the polynucleotide comprises a sequence selected from the group consisting of 5'-TCGTCGA-3', 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3' and 5'-TCGTTTT-3'.
50. (withdrawn): The method of claim 30, wherein said polynucleotide further comprises the sequence 5'-T, C, G-3'.

51. (withdrawn): The method of any of claims 30, 44, 47, 48, 49 or 50, wherein said polynucleotide is 7 nucleotides in length.

52. (withdrawn): The method of any of claims 30, 44, 47, 48, 49 or 50, wherein said composition further comprises an antigen.

53. (withdrawn): The method of claim 52, wherein said antigen is an allergen.

54. (withdrawn): The method of claim 30, wherein said polynucleotide comprises a phosphate backbone modification.

55. (withdrawn): The method of claim 54, wherein said phosphate backbone modification is a phosphorothioate.

56. (previously presented): A kit, comprising:
an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, said complex comprising a polynucleotide linked to a nonbiodegradable microcarrier (MC), wherein said polynucleotide comprises a sequence selected from the group consisting of 5'-TCGAAAA-3', 5'-TCGCCCC-3', 5'-TCGGGGG-3', 5'-TCGTTTT-3' and 5'-TCGTCGX₁-3', wherein X₁ is a nucleotide, and wherein the polynucleotide is less than about 200 nucleotides in length; and
instructions for use of IMP/MC complex in immunomodulation of an individual.

57. (original): The kit of claim 56, wherein said polynucleotide is covalently linked to said microcarrier.

58. (original): The kit of claim 56, wherein said polynucleotide is non-covalently linked to said microcarrier.

59. (original): The kit of claim 56, wherein said microcarrier is a liquid phase microcarrier.

60. (original): The kit of claim 56, wherein said microcarrier is a solid phase microcarrier.

61. (original): The kit of claim 56, wherein said microcarrier is from 10 nm to 10 μ m in size.

62. (original): The kit of claim 61, wherein said microcarrier is from 25 nm to 5 μ m in size.

63. (original): The kit of claim 56, wherein said complex is antigen-free.

64-68. (canceled)

69. (previously presented): The kit of claim 56, wherein the polynucleotide comprises the sequence 5'-TCGTCGA-3'.

70. (canceled)

71. (previously presented): The kit of claims 56 or 69, further comprising an antigen.

72. (original): The kit of claim 71, wherein said antigen is an allergen.

73. (original): The kit of claim 56, wherein said polynucleotide comprises a phosphate backbone modification.

74. (original): The kit of claim 73, wherein said phosphate backbone modification is a phosphorothioate.

75. (currently amended): A kit, comprising:
the IMP/MC complex of any of claims [[20-24]] 20, 22, 23, and 24; and
instructions for use of IMP/MC complex in immunomodulation of an individual.

76. (original): A composition comprising the IMP/MC complex of claim 1 or claim 20
and a pharmaceutically acceptable excipient.

77. (original): A composition according to claim 76, wherein the composition is antigen-
free.

78. (original): A composition according to claim 76, wherein the composition further
comprises an antigen.

79. (original): A composition according to claim 78, wherein the antigen is an allergen.

80. (previously presented): The kit of claim 56 or claim 75, further comprising a
pharmaceutically acceptable excipient.